ON THE STANDING OF THE GENUS LIBURNIA STÅL

(Hemiptera, Fulgoridæ)

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In zoological nomenclature it probably is impossible to formulate any rule or set of rules that will fit all cases. always will be the element of personal judgment to interject itself into the application of such rules. One of these puzzling cases is that of Liburnia Stål. No student of nomenclature questions for a moment the rule that the type of a genus must be found among the species included in the genus at the time it was founded. However, the name Liburnia was first given by Stål, not as a new genus, but as a name for what was at that time an old and well known generic concept. Therefore to find its type, one must first locate the type of the genus that had been masquerading under that name. The whole trouble comes from the fact that Stål, in 1866, called that genus Delphax Auct. instead of Delphax Latreille. Stål's meaning will become perfectly plain to anyone who will look up the history of the generic name Delphax. To ignore these facts and misinterpret Stål's use of Delphax Auct. is a mere quibble.

Here are a few pertinent facts: Latreille, in 1796, described a genus Cercopis in his "Precis" (p. 91) for which be substituted Asiraca at page 202 but without the mention, in either place, of a species. This genus Asiraca, he validated in 1802 by including the species longicornis Latr., clavicornis Fabr. and crassicornis Fabr. In the meantime (1798), however, Fabricius had established his genus Delphax with crassicornis and clavicornis as species, and in 1803 he added eight other species. 1804 Latreille reaffirms his genus Asiraca, complains that Fabricius had redescribed it as Delphax, and lists nine species, among them clavicornis, crassicornis and pellucida, thus making his Asiraca equivalent to Delphax of Fabricius. But in 1807 he recognizes Asiraca with clavicornis and four other species, and Delphax Fabr. with "pellucida Fabr. "ejusd. Delphacies This statement by flavescens, striata, marginata, minuta." Latreille distinctly designates pellucida as the type of his genus Delphax and it is this generic concept that was used by practically all hemipterists until Stål corrected the liberties Latreille had taken with Fabricius' genus, by renaming *Delphax* of Latreille as *Liburnia*. This genus *Liburnia*, as named by Stål in 1866, was so used by Scott in his revision of the family in 1870-1871, by Sahlberg in 1871, by Fieber in his Katalog of 1872 and in his monograph of 1875, by Melichar in 1896 and by me in 1897. Until the time of Muir, the only work of a monographic character in which the name *Delphax* was used in place of *Liburnia* was that by Kirschbaum, and it is probable that this work (1868) was written before Kirschbaum had seen Stål's Hemiptera Africana.

The validity of the name *Delphax* Fabricius does not affect the standing of genus *Liburnia* Stål and need not be considered here.

Bibliography

GENUS DELPHAX Fabr.

- 1796. Latreille, Precis des Characteres Generiques des Insectes, p. 91 (Cercopis), p. 202, Asiraca.
- 1798. Fabricius, Entomologiæ Systematicæ, Supplementum, pp. 511, 522.
- 1802. Walckenaer, Faune Parisienne, Insectes, vol. 2, p. 329, Delphax (crassicornis & clavicornis).
- 1802. Latreille, Histoire Naturelle des Crustaces et des Insectes, vol. 3, p. 259. Asiraca (longicornis, clavicornis and crassicornis).
- 1803. Fabricius, Systema Rhyngotorum, p. 83. (Equals Delphax Auct.).
- 1804. Latreille, Histoire Naturelle des Crustaces et Insectes, vol. 12, p. 316. (Asiraca, equals Delphax Auct.)
- 1807. Latreille, Genera Crustacearum et Insectorum. Vol. 3, p. 167 (Asiraca), p. 168 Delphax (pellucida "ejusd. flavescens) and three more.
- 1810. Latreille, Considerations Generales, p. 263 and 434. (Asiraca, type clavicornis Fab., Delphax, type striata Fab.)
- 1815. Leach, Article Entomology in Brewster's Edinburgh Encyclopedia, vol. 9, pp. 57-175, p. 125. (Asiraca for clavicornis and Delphax for pellucida.)
- 1818. Germar, Mag. Ent., vol. 3, p. 205; continued in vol. 4, p. 105, 1821. (Asiraca for clavicornis and Delphax for other species.)
- 1826. Fallen, Hemipt. Sueciæ, Cicadariæ, p. 73. (Delphax, includes crassicornis, pellucida and allies.)
- 1828. Zetterstedt, Fauna Insectorum Lapponica, p. 547. (Delphax pellucida and three others.)
- 1829. Germar, Thon's Entomologische Archiv, vol. 2, p. 57. (Asiraca with eight species, Delphax with pellucida and nine other species.)

- 1835. Burmeister, Handbuch der Entomologie, vol. 2, p. 150. (Delphax, three species, Asiraca, two species.)
- 1837. Curtis, British Entomology, vol. 7, plate 657 (for longipennis, names minuta pseudotype. Plate 445 Asiraca pulchella.)
- 1839. Spinola, Essai sur les Fulgorelles, in Ann. Soc. Ent. Fr., ser. 3, vol. 8, pp. 329-337. (Delphax pellucida and five other species, Araeopus n.g. for crassicornis, Asiraca for clavicornis.)
- 1840. Zetterstedt, Insecta Laponica. Column 305. (Delphax for pellucida and three other species.)
- 1840. Westwood, Introduction to the Modern Classification of Insects, vol. 2. Suppl. p. 116. (Asiraca, type clavicornis; Delphax, type minuta Fabr. not an original species.)
- 1840. Blanchard, Histoire des Insectes, vol. 3, pp. 176, 177. (Asiraca for clavicornis and crassicornis; Delphax for limbata and marginata.)
- 1851. Walker, List of Specimens of Homopterous Insects in the British Museum, p. 350. (Equals *Delphax* of Latreille, lists 51 species.)
- 1854. Stål, Of. Kongl. Vet. Akad. Forh., vol. 11, pp. 189 to 197. (Monographic but omits Asiraca.)
- 1859. Dohrn, Catalogus Hemipterorum, p. 61. (Lists 80 species of *Delphax* Auct.)
- 1861. Flor, Rhynchoten Livlands, vol. 2, p. 25. (Equals Delphax Auct. Lists 28 species.)
- 1866. Fieber, Grundzuege zur generischen Theilung der Delphacini. Verh. d. k. k. Zool. Bot. Ges. Band 16, pp. 517-534. (Equals *Delphax* Auct., monographic.)
- 1868. Kirschbaum. Die Cicadinen der gegen von Wiesbaden und Frankfurt. pp. 19 to 40. (Monographic, 45 species.)

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- 1866. Stål, Hemiptera Africana, vol. 4, p. 179. (New name for Delphax of Authors.)
- 1870-1871. Scott, Revision of the Family Delphacidæ with descriptions of several new species of the Genus *Delphax* of authors. (Ent. Monthly Mag., vol. 7, pp. 22, 67, 193, monographic.)
- 1871. Sahlberg, Of. af Finlands och den Skandinaviska Halfons Cicadariæ, p. 422. (Monographic for that fauna.)
- 1872. Fieber, Katalog der europaischen Cicadinen, p. 5 (for Delphax Auct.)
- 1875. Fieber, Les Cicadines d'Europe; Rev. Mag. Zool., vol. 26, p. 89 and 1879, pp. 1 to 78. (Monographic.)
- 1896. Melichar, Cicadinen von Mittel-Europa, pp. 69-94. (Monographic.)